

REMARKS

Applicant is in receipt of the Office Action mailed October 31, 2007. Claims 1-18, and 26-28 are pending in the case. Reconsideration of the present case is earnestly requested in light of the following remarks.

Section 102 Rejections

Claims 1, 4, 12, 15-16, and 26-28 were rejected under 35 U.S.C. 102(e) as being anticipated by Kawachi et al. (US 6,690,981, “Kawachi”). Applicant respectfully traverses the rejection.

Claim 1 recites:

1. A computer accessible memory medium comprising program instructions, wherein the program instructions are executable by a processor to implement:

displaying a palette, including a display window comprising a plurality of graphical program nodes for use in a graphical program, wherein each graphical program node comprises an icon and program code, wherein each graphical program node is represented by the graphical program node’s respective icon in the palette and is selectable from the palette for inclusion in the graphical program;

wherein the plurality of graphical program nodes comprises:

a first plurality of function nodes displayed in the display window, wherein each function node corresponds to a respective functionality; and

a second plurality of property nodes displayed in the display window, wherein each property node corresponds to a respective one of at least a subset of the plurality of function nodes, wherein each property node is displayed proximate to said respective one of the at least a subset of the plurality of function nodes.

Nowhere does Kawachi disclose displaying a palette that displays a plurality of graphical program nodes, **wherein the plurality of graphical program nodes comprises: a first plurality of function nodes displayed in the display window, wherein each function node corresponds to a respective functionality; and a second**

plurality of property nodes displayed in the display window, wherein each property node corresponds to a respective one of at least a subset of the plurality of function nodes, wherein each property node is displayed proximate to said respective one of the at least a subset of the plurality of function nodes, as recited in claim 1.

In asserting that Kawachi discloses **wherein the plurality of graphical program nodes comprises: a first plurality of function nodes displayed in the display window, wherein each function node corresponds to a respective functionality**, as recited in claim 1, the Office cites Figures 7A and 7B, and associated text.

Cited Figure 7A and associated text are directed to a graphical program that includes user interface code encapsulated in a subprogram, labeled “adjust pos”, that is operable to perform modifications of field layouts in a GUI, e.g., a user interface panel, based on changes to the GUI’s boundaries. Nowhere does Figure 7A or its associated text describe or mention displaying a palette of function nodes.

Cited Figure 7B and associated text disclose a user interface panel associated with the graphical program of FIG. 7A, including fields for data file specification, status messages, and an error log. Again, nowhere does Figure 7B or its associated text describe or mention displaying a palette of function nodes.

Thus, Applicant respectfully submits that Kawachi fails to disclose this feature of claim 1.

Nor does Kawachi disclose **a second plurality of property nodes displayed in the display window, wherein each property node corresponds to a respective one of at least a subset of the plurality of function nodes, wherein each property node is displayed proximate to said respective one of the at least a subset of the plurality of function nodes**, as recited in claim 1.

Cited Figure 22 and associated text are directed to an exemplary property node. More specifically, these citations disclose a property node, and various properties that may be retrieved or set via the property node. More specifically:

FIG. 22 illustrates in detail one embodiment property node. In the FIG. 22 embodiment, the inputs and outputs of the property node are as follows: “reference” is the reference associated with a user interface element or other object. “error in” describes error conditions that exist prior to the

execution of this node. The default input is "no error". "dup reference" has the same value as reference. "error out" describes error information. If "error in" indicates an error, "error out" comprises the same error information. Otherwise "error out" describes the error status that this node produces.

As may be seen from Figure 22 and the cited text, nowhere do these citations disclose displaying a plurality of property nodes in a display window of a palette, and more specifically, with each property node corresponding to a respective one of at least a subset of the plurality of function nodes, as claimed.

Cited Figures 18A, 18B, and associated text are directed to configured reference controls. More specifically, Figure 18A (and associated text) discloses a reference control configured to accept a reference to numeric input controls via a user dragging and dropping a numeric input control on the reference control (see Figure 17). Figure 18B (and associated text) discloses displaying the numeric input control that was dropped onto the property node in Figure 17, e.g., by the user invoking a popup menu. Again, nowhere do these citations (nor Kawachi in general) disclose displaying (in a palette) a plurality of property nodes along with corresponding function nodes displayed in the palette, as claimed.

Cited Figure 19 and associated text are directed to a user interface control that “may belong to a general class of controls for providing numeric input data to a program, may belong to a subclass of controls of similar or identical appearance, and may have a data type of ‘floating point’.” Again, nowhere do these citations (nor Kawachi in general) disclose displaying a plurality of property nodes in a palette along with corresponding function nodes, as claimed.

In asserting that Kawachi discloses displaying such property nodes and function nodes, “wherein each property node is displayed proximate to said respective one of the at least a subset of the plurality of function nodes, as recited in claim 1, the Office Action cites Figures 1, 12, and 14, and accompanying text.

Applicant has reviewed these citations (and Kawachi in general) closely, and can find no description or even mention of displaying a plurality of property nodes in a palette proximate to respective function nodes in the palette. For example, Figure 1 illustrates an exemplary prior art front panel or user interface panel associated with a

graphical program, which Applicant respectfully notes displays neither function nodes nor property nodes; Figure 12 illustrates a property node pre-configured with an implicit reference to a user interface control, but the property node is not shown or described as being displayed proximate to a corresponding function node in a palette. Finally, Figure 14 illustrates associating an existing property node with a particular user interface element, specifically, via a menu. Again, nowhere is the property node shown or described as being displayed proximate to a corresponding function node in a palette.

Thus, for at least the reasons provided above, Applicant submits that Kawachi fails to teach or suggest these features of claim 1.

Additionally, Applicant further submits that Kawachi fails to disclose **displaying a palette, including a display window comprising a plurality of graphical program nodes for use in a graphical program, wherein each graphical program node comprises an icon and program code, wherein each graphical program node is represented by the graphical program node's respective icon in the palette and is selectable from the palette for inclusion in the graphical program**, as recited in claim 1.

Applicant has reviewed the cited col.13:23-43, col.10:38-53, col.11:42-55, and Figure 10 and associated text very closely, and can find no mention of displaying a palette of graphical program nodes. In fact, the only mention made of a palette in Kawachi is in the first citation (col.13:23-43), but Applicant respectfully notes that the palette mentioned displays a reference control for a user interface panel, e.g., a GUI element, which is not a graphical program node. This point is made in the text immediately after this first citation:

Col.13:44-54 reads:

When a reference control is created on the subprogram user interface panel, a corresponding node may automatically be created on the graphical diagram associated with the subprogram. This node may then be connected to other nodes, e.g. property nodes or other subprogram nodes, in the subprogram graphical diagram, in order to provide these other nodes with the user interface element reference passed in to the subprogram. These other nodes may then use the user interface element reference as described above, e.g., to set or retrieve various properties of the referenced user interface element.

Thus, while a reference control may have an associated graphical program node, the control itself is not a node.

Thus, Applicant submits that Kawachi fails to disclose displaying a palette of selectable graphical program nodes, as claimed.

Thus, for at least the reasons provided above, Applicant submits that Kawachi fails to teach or suggest all the features and limitations of claim 1, and so claim 1, and those claims respectively dependent therefrom, are patentably distinct and non-obvious over the cited art, and are thus allowable.

Independent claims 27 and 28 include similar limitations as claim 1, and so the above arguments apply with equal force to these claims. Thus, for at least the reasons provided above, Applicant submits that claims 27 and 28, and those claims respectively dependent therefrom, are patentably distinct and non-obvious over the cited art, and are thus allowable.

Applicant asserts that numerous ones of the dependent claims recite further distinctions over the cited art.

For example, nowhere does Kawachi disclose **wherein each of the second plurality of property nodes comprises a function specific property node corresponding to a respective function; and wherein each function specific property node comprises one or more parameters for configuring corresponding attributes for the graphical program**, as recited in claim 12.

Cited Figure 10 illustrates a graphical diagram node referencing a user interface control (shown in FIG. 9). More specifically, Figure 10 illustrates a node referencing a numeric input control GUI element, i.e., the node represents the GUI element, and is not a function specific property node. Cited Figure 11 illustrates creating a property node pre-configured to have an implicit reference to a particular user interface control via selection of a menu item of a menu invoked from a numeric control. Figure 12 illustrates the property node created in response to the menu selection of Figure 11, where the property node is configured with an implicit reference to the user interface element. Applicant notes that the created property node of Figures 11 and 12 is specific to a GUI

element, not a function, and does not correspond to a respective function node displayed in a palette. Figure 13 illustrates finding the user interface element that a property node is implicitly associated with, and thus is not germane to display of a function specific property node that corresponds to a respective function node displayed in a palette.

Thus, Kawachi fails to teach or suggest the particular function-specific property nodes of claim 12, and further fails to display such property nodes in a palette along with corresponding function nodes, in the manner claimed.

Thus, applicant submits that the cited art fails to teach or suggest all the features and limitations of claim 12, and so claim 12, and those claims respectively dependent therefrom, are patentably distinct and non-obvious over the cited art, and are thus allowable.

Applicant asserts that numerous other ones of the dependent claims recite further distinctions over the cited art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.

Removal of the section 102 rejection of claims 1, 4, 12, 15-16, and 26-28 is earnestly requested.

Section 103 Rejections

Claims 2-3, 5-11, and 13-14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kawachi in view of Hudson et al. (US 7,024,631 B1, "Hudson").

Applicant notes that claim 1, from which claims 2-3, 5-11, and 13-14 depend, has been shown above to be patentably distinct and non-obvious over the cited art, and thus these dependent claims are similarly allowable, for at least the reasons provided above.

Applicant also submits that various of these dependent claims include further novel limitations over the cited art.

For example, nowhere does Kawachi or Hudson teach or suggest **wherein the first plurality of function nodes further comprises: a wait until done node**, as recited in claim 6.

The Office Action appears to admit that Kawachi does not teach these features of claim 4, but asserts that Hudson remedies this deficiency, citing col.8:1-6, which reads thusly:

The one or more devices may include a data acquisition board 114 and associated signal conditioning circuitry 124, a PXI instrument 118, a video device 132 and associated image acquisition card 134, a motion control device 136 and associated motion control interface card 138, a fieldbus device 170 and associated fieldbus interface card 172, a PLC (Programmable Logic Controller) 176, a serial instrument 182 and associated serial interface card 184, or a distributed data acquisition system, such as the Fieldpoint system available from National Instruments, among other types of devices.

As may be seen, this citation makes no mention of a “wait until done node”, nor displaying such a node in a palette of graphical program nodes. In fact, neither Kawachi nor Hudson mentions or even hints at a wait until done node at all.

Thus, Applicant respectfully submits that Kawachi and Hudson fail to teach or suggest this limitation of claim 6, and so claim 6, and those claims respectively dependent therefrom, are patentably distinct and non-obvious over the cited art, and are thus allowable.

Similarly, neither Kawachi nor Hudson describes **wherein the first plurality of function nodes further comprises one or more of: a timing node; a triggering node; a start node; a stop node; or a clear node**, as recited in claim 8.

As discussed above, cited Figure 7A and associated text of Kawachi are directed to a graphical program that includes user interface code encapsulated in a subprogram, labeled “adjust pos”, that is operable to perform modifications of field layouts in a GUI, e.g., a user interface panel, based on changes to the GUI’s boundaries. Nowhere does Figure 7A or its associated text describe or mention a timing node, a triggering node, a start node, a stop node, or a clear node, nor displaying such nodes in a palette.

As also discussed above, cited Figure 7B and associated text disclose a user interface panel associated with the graphical program of FIG. 7A, including fields for data file specification, status messages, and an error log. Again, nowhere does Figure 7B

or its associated text describe or mention a timing node, a triggering node, a start node, a stop node, or a clear node, nor displaying such nodes in a palette.

Thus, the cited art fails to teach or suggest all the features and limitations of claim 8, and so claim 8, and those claims respectively dependent therefrom, are patentably distinct and non-obvious over the cited art, and are thus allowable.

Nor does Kawachi or Hudson disclose **wherein the one or more of the timing node, the triggering node, the start node, the stop node, and the clear node comprise a secondary set of function nodes; and wherein the primary set of function nodes and the secondary set of function nodes are displayed in the display window in respective groups**, as recited in claim 9.

Cited Figure 17 and associated text of Kawachi are directed to an exemplary hierarchy window for a graphical program including a polymorphic node. More specifically, Figure 17 illustrates a calling hierarchy of the function nodes in a graphical program. Nowhere does Figure 17 or its associated text describe or mention displaying one or more of a timing node, triggering node, start node, stop node, or clear node as a secondary set of function nodes in a palette along with a primary set of function nodes (two or more of: a channel creation node, read node, and write node), where the primary set of function nodes and the secondary set of function nodes are displayed in the display window in respective groups. In fact, as mentioned above, neither Kawachi nor Hudson even mentions a timing node, triggering node, start node, stop node, or clear node.

Thus, the cited art fails to teach or suggest all the features and limitations of claim 9, and so claim 9, and those claims respectively dependent therefrom, are patentably distinct and non-obvious over the cited art, and are thus allowable.

Applicant asserts that numerous ones of the dependent claims recite further distinctions over the cited art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.

Removal of the section 103 rejection of claims 2-3, 5-11, and 13-14 is earnestly requested.

CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above-referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Meyertons, Hood, Kivlin, Kowert & Goetzel P.C., Deposit Account No. 50-1505/5150-81100/JCH.

Also filed herewith are the following items:

- ☐ Request for Continued Examination
- ☐ Terminal Disclaimer
- ☐ Power of Attorney By Assignee and Revocation of Previous Powers
- ☐ Notice of Change of Address
- ☐ Other:

Respectfully submitted,

/Jeffrey C. Hood/

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